# 2.4 GHz Wireless B&W Video Security System with 1 camera

### **Instruction Manual**

English Version1.0



MODEL: SG6331P



www.lorexinternational.com

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#### **CAUTION**





CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

#### **Explanation of two Symbols**



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance(servicing) instructions in the literature accompanying the appliance.

THE GRAPHIC SYMBOLS WITH SUPPLEMENTAL MARKING ARE ON THE BOTTOM OF THE SYSTEM.

WARNING: To prevent fire or shock hazard, do not expose this unit to rain, water, or wet locations. Do not insert any metallic object through the ventilation grills.

#### FCC CLASS B NOTICE

#### Note:

This equipment has been tested and found to comply with the limits For a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instruction, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, (which can be determined by turning the equipment off and on), the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna
- Increase the separation between the monitor and the camera.
- Connect the equipment into an outlet on a circuit different from that to which other devices may be connected.
- Consult the dealer or an experienced radio or television technician for help.

#### SAFETY INSTRUCTIONS

#### IMPORTANT SAFEGUARDS

All the safety and operating instructions should be read before the Appliance is operated and retained for future reference.

- HEED WARNINGS All warnings on the appliance and in the operating instructions should be adhered to.
- FOLLOW INSTRUCTIONS All operating instructions should be followed.
- 3. WATER AND MOISTURE Do not use this video product near water for example, a bath tub, wash bowl, kitchen sink, laundry tub or swimming pool, or in a wet basement.
- **4. POWER SOURCES** This product should be operated only from the type of power source indicated on the marking label.
- OVERLOADING Do not overload outlets and extension cords, which can result in a risk of fire or electric shock.
- 6. SERVICING Do not attempt to service this product yourself. Opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing or repairs to qualified service personnel.
- 7. DAMAGE REQUIRING SERVICE Unplug this product from the wall outlet and refer servicing or repairs to qualified service personnel under the following conditions:
  - a. When the power supply cord or plug is damaged.
  - b. If liquid has been spilled or objects have fallen into the product.
  - c. If the product has been exposed to rain or water.
  - d. If the product does not operate normally by following the operating instructions. Adjust only those controls that are covered by the operating instructions.
  - e. If the product has been dropped or the cabinet has been damaged.
  - f. When the product exhibits a distinct change in performance.
- 8. REPLACEMENT PARTS When replacement parts are required, be sure the service technician has used replacement parts that are specified by the manufacturer or have the same characteristics as the original part. Unauthorized substitutions may result in fire, electric shock, or other hazards.
- **9. SAFETY CHECK** Upon completion of any service or repairs to this video product, ask the service technician to perform safety checks to determine if the video product is in proper operating condition.
- 10. An appliance and cart combination should be moved with care. Do not place this equipment on an unstable cart, stand, or table. The equipment may fall, causing serious injury to a child or adult, and serious damage to the equipment. Wall or shelf mounting should follow the manufacturer's instructions and should be done with a mounting kit approved by the manufacturer.

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#### INTRODUCTION:

Thank you for purchasing the 2.4 GHz Wireless B&W Video System. This is an ideal solution for monitoring your business or home, or for safeguarding your valuables. The package contains a 5.5" B&W Monitor, and 1 wireless B&W camera.

The system allows you to automatically scan between locations with the convenience of connecting up to 4 cameras (additional cameras sold separately). Use the Listen-in Audio feature to pick up sound within a specific location. Avoiding the hassle of running wires, this system is easy to install and operate for your immediate security applications.

The RCA audio/video outputs also allow you to connect a time lapse VCR or standard VCR for recording purposes.

To learn more about this 2.4GHz Wireless B&W Video System and our complete range of accessory products, please visit our website at:

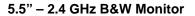
#### www.lorexinternational.com

#### **FEATURES:**

- Auto Scanning Up to 4 cameras
- Wireless range of up to 300 ft (open space, no obstacles)
- Sequential or Full Screen Viewing options
- · Listen-in Audio
- Built-in Speaker with volume control
- Audio/Video outputs allow user to record picture to any standard VCR
- LED indicator lights show system status
- Camera with battery option (4 "AA" batteries, not included)
- Monitor with battery option (10 "C" batteries, not included)
- · Camera ideal for ceiling, wall or table mounting

#### **SYSTEM INCLUDES:**







1 - 2.4 GHz B&W Wireless Camera with camera stand & screws



**Owner's Manual** 

#### Also includes:

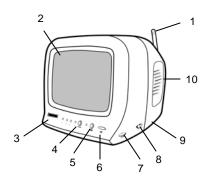
- 1 9V DC 500mA Adapter (Camera) with battery option (4 "AA", not included)
- 1 13.8V DC 1000mA Adapter (Monitor) with battery option (10 "C", not included)
- 1 RCA Audio/Video Cables

Mounting hardware
Window decals

#### MONITOR CONTROLS – FRONT & BACK PANEL

#### MONITOR FRONT VIEW

#### MONITOR BACK VIEW

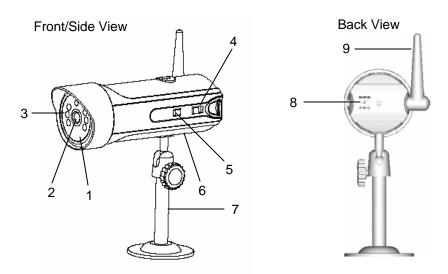




#### **Location of Receiver Monitor controls**

- **1. 2.4GHz Antenna -** High gain dipole patch antenna receives audio and video signal from the camera.
- 2. CRT 5.5" Diagonal Screen
- 3. Brightness Control Allows you to adjust the brightness of the picture
- **4. Channel Selector -** Switches between channel 1-4 / AUTO selection.
- Auto/Manual Button Allows you to switch from AUTO mode to the MANUAL mode
- **6. Audio Mute Button** Push this button to mute the sound on the monitor
- 7. Volume Control Turn this dial to adjust the volume on the monitor
- 8. ON/OFF Switch Used to switch the power on the monitor ON or OFF
- Battery Compartment (not shown) Requires 10 "C" Batteries (not included).
- 10. Speaker Emits sound from the camera location
- 11. DC Input Jack Connect to the supplied 13.8V DC 1.0A AC adapter.
- **12. Audio Output Jack -** RCA jack for Audio output connection
- **13. Video Output Jack -** RCA jack for Video output connection
- 14. Contrast Control Allows you to adjust the contrast of the picture

#### **CAMERA CONTROLS**

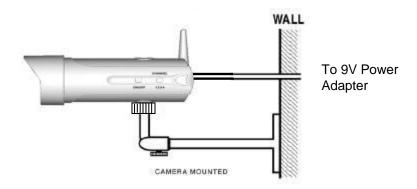


- **1. Microphone** Built-in condenser microphone provides listen-in audio capability from camera to monitor
- 2. Lens B&W CMOS Image Sensor
- 3. 6 Infrared LED's Enhances the picture quality in low light conditions
- 4. Channel Selector Switch Slide switch for channels 1-4
- **5. ON/OFF Power Switch** Controls power to the camera. Note: Please ensure that you set the switch to the OFF position before plugging the AC adapter into the unit
- **6. Battery Compartment** Optional 4 "AA" batteries (not included) can be used to power the camera
- **7. Bracket** Metal bracket connects to camera for mounting to walls, ceilings or table
- 8. DC IN Jack Connects to the 9V DC (500mA) adapter.
- 9. 2.4GHz Antenna High gain dipole antenna sends audio and video signals to the monitor

#### **CAMERA INSTALLATION**

NOTE

Ensure the power switch on the monitor and camera are set to the OFF position before proceeding with the following steps.



- 1. Attach the stand base to the wall or ceiling where you want to install the camera. Locate a wall stud or ceiling, and secure the bracket using the four supplied screws.
- 2. Attach the camera to the stand and firmly tighten the swivel.
- 3. Attach the camera with the stand to the stand base, and firmly tighten the joint knob on the stand base.
- 4. Connect the supplied 9V 500mA DC adapter to the DC IN jack at the rear of the camera, and plug it into an electrical outlet.

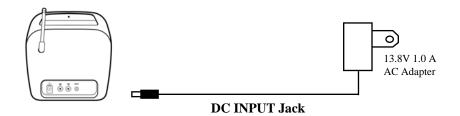
If you are not using AC power (9V 500mA adapter) then you have the option of using 4 "AA" alkaline batteries in your camera.

- 1. Ensure the power switch on the camera is turned OFF.
- 2. Carefully slide open the battery compartment (bottom of camera)
- 3. Insert 4 "AA" batteries (not included) into the compartment noting the polarity

Warning: to prevent damage to the unit, ensure the batteries are aligned properly and battery types are not mixed

4. Close the compartment and turn camera "ON"

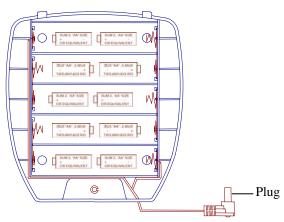
#### MONITOR INSTALLATION



1. Connect the supplied 13.8V AC adapter to the DC INPUT JACK at the rear of the receiver monitor and plug it into an electrical outlet.

#### **BATTERY CASE & COMPARTMENT**

Remove the battery case by unscrewing the bolt at the bottom of the monitor and sliding the battery case out. This system requires 10 'C' sized batteries (not included)



Your wireless monitor has both AC or battery option. When using the AC option with rechargeable batteries, your monitor will automatically switch to back up battery feature during a power outage providing you with uninterrupted power to the monitor. The battery option also provides you the flexibility to move the monitor from room to room. Battery life is approximately 2-3 hours

**Warning**: To prevent damage to the unit, ensure that the batteries are aligned properly and battery types are not mixed.

#### **OPERATION**

#### Camera

(1) Connect the power adapter to the camera power input and ensure the camera is turned "ON". Ensure the camera is set to channel 1.

#### Monitor

- (1) Connect the supplied power adaptor to the power input of the monitor.
- (2) Use the channel selection switch button and ensure the monitor is set to the same channel as the camera to view the picture. Note: If you experience transmission reception problems (eg. poor picture), you may need to select another channel on the camera and monitor and/or adjust the antennas on the monitor and camera to ensure they are pointing at each other.
- (3) Adjust the volume to the desired level. You may also mute the audio option by pressing the mute button which is located at the front of the monitor.
- (4) Adjust the brightness and contrast level as required

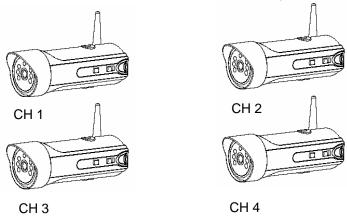


Try to position both the Camera and Monitor as high off the ground as possible for better picture reception

#### **ADDITIONAL CAMERA CONNECTION**

This video security system allows you to view up to four different camera locations. Additional cameras are sold separately, please refer to www.lorexinternational.com for more information.

When connecting more than one camera to the monitor/camera system, you will need to set each camera to a different channel (Channels 1-4).



#### **AUTO & MANUAL VIEWING OPTIONS**

This system is preset to Manual mode. In Auto mode, the LED light will be ON.

To manually view a specific camera location, set the Auto/Manual button to Manual. Then press the channel selector button to navigate between Channels 1-4.

Set the Auto/Manual button to Auto in order to have the system automatically rotate between camera locations.

#### **AUTO SCANNING**

This video security system provides you the option to automatically switch between the four camera locations. If you have fewer than four cameras, you can also set the system to scan between three or two locations.

Setting Auto Scan to 2 or 3 camera locations:

- 1. Press and hold the Auto/Manual button for more than 2 seconds. All four LED lights on the front of the monitor will turn ON.
- 2. Continue to press and hold the Auto/Manual button. The Channel 4 LED button will turn off. The system is now set to scan between three camera locations (Channel 1-3)
- 3. Continue to press and hold the Auto/Manual button. The Channel 3 LED button will now be turned off. The system is now set to scan between two camera locations (Channel 1-2)
- 4. Continue to press and hold the Auto/Manual button to return to the four camera viewing option (all four LED lights will be illuminated)

#### SELECTABLE DWELL SETTINGS

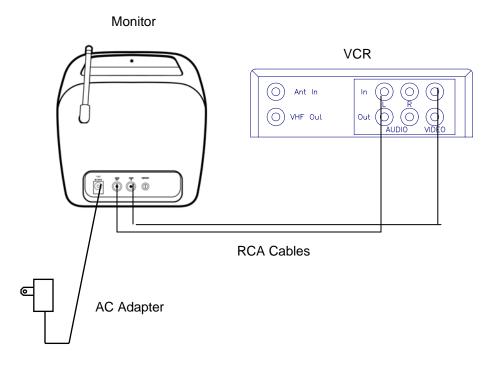
Dwell Setting is the time duration between each camera view in the auto sequence mode

This system provides you the option of three selectable dwell times (2, 5 and 10 seconds) when set to Auto Mode. This system is preset to two second selection.

Changing Dwell Time:

- 1. Press and hold the CH select button. The LED light will turn on to indicate that it is set to 2 seconds.
- Continue to press and hold the CH select button. The LED light will flash at a one second interval to indicate that it is now set to the 5 second interval
- 3. Continue to press and hold the CH select button.
- 4. The LED button will flash three times to indicate it is set to the 10 second interval.

#### CONNECTING THE MONITOR TO A VCR FOR RECORDING



#### **Connections for recording**

Connect the supplied audio/video cable from the back of the monitor to the Audio/Video In of the VCR.

<u>Please Note</u>: To record, you must select the A/V or AUX channel on your VCR.

#### Did You Know?

You have the option of connecting this system to a Time Lapse VCR. A time lapse VCR provides you multiple recording options allowing you to record up to 40 days using a standard T120 tape. Refer to the optional accessories page for more details.

#### **OPTIONAL ACCESSORIES**

The following optional accessories are available to add to your existing system:



Accessory Camera - Used to view other camera locations

Compatible models: SG6110X, WL5210X, SG6212 from Lorex / Sylvania / Home Sentinel



Time Lapse VCR - Used to record key events. Available in 40 or 1280 Hour Time Lapse VCR

#### **TROUBLESHOOTING**

If the system does not function properly, check the following points.

Duchlana	Causes and remedies	
Problems	Camera	Monitor
No power (no picture/sound)	<ul><li>AC adapter not plugged in</li><li>Power switch not turned on</li></ul>	<ul><li>AC adapter not plugged in</li><li>Power switch not turned on</li><li>Monitor not turned on</li></ul>
Poor reception	<ul> <li>AC adapter not plugged in</li> <li>Power switch not turned on</li> </ul>	- Adjust antenna direction - Improper channel
Picture flickering	- Strong spot light in the field of view	
Picture too bright, or too dark	-Lighting source in the field of view	- Adjust brightness control on Monitor
Picture rolls and jumps or scrambled picture	-Adjust antenna direction	- Adjust antenna direction

FOR MORE INFORMATION www.lorexinternational.com

#### TECHNICAL SPECIFICATIONS

#### Camera

Image sensor CMOS B&W Lens 3.6mm

Picture Elements 320 X 240 (B&W) Scanning system 2:1 interlace

Scanning frequency 15.734 KHz(H) 59.94Hz (V) Sync. system Internal Negative synchronization

Resolution 240 Lines (B&W) 0.Lux @ F2.0 (B&W) Min. illuminations 1.0Vp-p/75 Ohm Video Output

r=0.45Gamma characteristics

Electrical Auto Iris Auto Iris

Shutter sensitivity: 1/60-1/6,000

Electrronic Condenser Microphone 2.4 GHz-2.4835 GHz (4Ch) Transmitting frequency

FΜ Modulation

90dBu/V, 3m RF out level 1.0Vp-p/75 Ohm Video Output level

Dipole Antenna

6.2" (Length) x 2.2" (Diameter) **Dimensions** 4 "AA" batteries, not included **Battery Option** -14° to + 122° F (-10°C to + 50 °C) Operating temperature

9V DC 500mA Adapter Power source

#### Monitor

Screen Size 5.5" diagonal

Receiving frequency 2.41GHz - 2.4835GHz (4CH & AUTO)

1.0Vp-p/75ohm (Video), Output level

1.0Vp-p (Audio)

Sensitivity -25dBm to -80dBm

Antenna Dipole

Resolution More than 280 lines

Sound output 0.5 Watt.

**Power Source** 13.8V DC 1000mA

**Battery Option** 10 "C" batteries, not included Dimension 6.1"(W) × 7.1"(H) × 5.8"(D)

Power consumption 800 mA

Operating Temperature 14° F to + 122° F (-10°C to + 50 °C)

Weight Approx. 2.9lbs or 1.32 Kg

Because our products are subject to continuous improvement, SVII and its subsidiaries reserve the right to modify product design and specifications without notice and without incurring any obligation. E&OE

#### **CARE AND MAINTENANCE:**

Please follow these instructions to ensure proper care and maintenance of this system

Keep your monitor and camera dry. If it gets wet, wipe it dry immediately.

Use and store your unit in normal temperature environment. Extreme temperatures can shorten the life of the electronic devices.

Handle the monitor carefully. Dropping it can cause serious damage to the unit.

Occasionally clean the unit with a damp cloth to keep it looking new. Do not use harsh chemicals, cleaning solvents or strong detergents to clean the unit.

Keep the unit away from excessive dirt and dust. It can cause premature wear of parts.









## It's all on the web

- Product Information
- User Manuals
- ② Quick Start Guides
- **Specification Sheets**
- Software Upgrades
- Firmware Upgrades



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